

REMARKS

In the Advisory Action mailed July 2, 2004, the Examiner indicated that Applicants' after-final amendments would not be entered. However, the Examiner did indicate that incorporating the limitations of Claim 13 into Claim 12 would advance prosecution as long as "stimulation of collagen regeneration" was recited as a positive step. As such, Applicants have amended Claim 12 as requested by the Examiner (as well as Claims 14 and 15) and cancelled Claim 13. For the Examiner's convenience, Applicants' previous arguments in the after-final Amendment are presented below to address the following outstanding rejections:

- (I) Claims 12, 14-17, and 20-24 were rejected under 35 U.S.C. 103(a) as allegedly unpatentable over Futami et al. (U.S. Pat., 4,740,245); and
- (II) Claims 12 and 14-24 were rejected under 35 U.S.C. 103(a) as allegedly unpatentable over Futami et al. ('245) in view of Futami et al. (U.S. Pat. 5,051,130).

Applicants submit that upon entry of the above claim amendments, and in light of the discussion below, the claims should be passed to allowance.

I-II. Claims 12 and 14-24 are Not Obvious

In the Final Office Action, the Examiner put forth two obviousness rejections. First, the Examiner rejected Claims 12 and 14-17 under 35 U.S.C. as being unpatentable over Futami et al. (U.S. Pat. 4,740,245; the '245 patent). The Examiner also rejected Claims 12 and 14-25 under 35 U.S.C. 103(a) as unpatentable over the '245 patent in view of U.S. Pat. 5,051,130 (the '130 patent). Applicants respectfully disagree with these rejections.

Both of the obviousness rejections are premised on the alleged teaching in the '245 and '130 patents of applying a composition to a "bone wound," with the Examiner asserting that a "bone wound" includes a root canal. The Examiner asserts that the scope of the claims are not limited to applying the composition to a bone, and therefore would include root canals. For example, the Examiner states:

"The rejected claim does not require application of a composition on or in a bone or bone structure. Rather, the recitation of claim 12 is directed to applying a composition to "a bone wound." According to the specification "a bone wound" includes a root canal or dental cavity." (*emphasis in original*, Office Action, pages 3-4);

and

"However, as reasoned above, Examiner ascertained the scope of the term "bone wound" to include dental injuries on tissues that lie on top of the bone, such as dental cavity or root canal. Nowhere does the claim exclude such injuries or limit the claim to application of the material on the bone or in the bone. (*emphasis added*, Office Action, page 4).

Applicants disagree with the Examiner's obviousness rejections and submit that no *prima facie* case of obviousness has been established (see previous Response dated 12-2-03). Nonetheless, for business reasons, in order to further the prosecution of the present Application, yet without acquiescing to the Examiner's rejections, while explicitly reserving the right to prosecute the original claims (or similar claims) in the future, Applicants have amended the claims. In particular, Claim 12 has been amended to recite applying the composition on or in a bone.¹ Support for this amendment is found in the Specification, for example, at page 3, lines 5-8. Claim 12 has also been amended, as requested by the Examiner, to recite c) stimulating collagen regeneration in the bone.² Support for this amendment is found in the Specification, for example, at page 2, lines 37-39 and page 4, lines 33-34.

As the claims now recite applying a composition "on or in a bone," the teaching of applying a mixture to a "root canal" in the '245 patent cited by the Examiner fails to teach this limitation (since a "root canal" is tissue, not bone). The claims have also been amended by incorporating the limitations of Claim 13 into Claim 12 such that Claim 12 now recites "stimulating collagen regeneration in said bone." As noted above, the Examiner did not specifically reject Claim 13. Since all of the pending claims now include the limitations found in Claim 13, and the Examiner did not specifically reject Claim 13, Applicants submit that all of the Claims should be passed to allowance. Moreover, the art cited by the Examiner (the '245 and '130 patents) does not teach applying a composition to a bone and "stimulating collagen regeneration." Consequently, Applicants submit that the Examiner would not be able to establish

¹ Applicants note that Claims 14 and 15 have also been amended to conform to the amendments of Claim 12 (i.e. by referring back to the "bone" now recited in Claim 12).

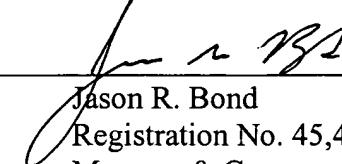
² Applicants note that this amendment recites the "positive step" requested by the Examiner. However, Applicants also note that it is the composition itself that promotes collagen regeneration (e.g. by delaying the release of alkalinity, see e.g., page 2, lines 36-38). Therefore, one example of step c) "stimulating collagen regeneration" would be to leave the composition on or in the bone until the desired level of collagen regeneration is observed. In light of the teaching of the specification, it is believed that this is what the Examiner has in mind on page 2 of the Advisory Action mailed July 2, 2004.

a *prima facie* case of obviousness in light of the cited art. Therefore, the amended Claims should be allowed.

Conclusion

For the reasons set forth above, it is respectfully submitted that Applicants' claims should be passed to allowance. If the Examiner believes an Interview would help expedite the allowance of this case, Applicants ask the Examiner to call the undersigned at 608-218-6900.

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